AD-753 330

AMIS AND MIMS: THE INTERACTION OF THE ARMY MANAGEMENT INFORMATION SYSTEMS WITH THE CURRENT MAJOR ITEM MANAGEMENT SYSTEM

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Research Analysis Corporation

Prepared for:

Army Materiel Command

November 1972

AD753330

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The findings in this report are not to be construed as
an official Department of the Army position unless so
designated by other authorized documents.

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DOCUMENT CONTROL DATA - R&D

(Security classification of title, body of abstract and indexing annotation must be entered when the overall report is classified)

1 ORIGINATING ACTIVITY (Corporate author)	2a REPORT SECURITY CLASSIFICATION
Research Analysis Corporation McLean, Virginia 22101	UNCIASSIFIED
	2b GROUP

3 REPORT TITLE

AMIS and MIMS: The Interaction of the Army Management Information Systems with the Current Major Item Management System.

4 DESCRIPTIVE NOTES (Type of report and inclusive dates)

5 AUTHOR(S) (First name, middle initial, last name)

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Paul S. Souder, Jr.

6 REPORT DATE	7a TOTAL NO OF PAGES	7b NO OF REFS
November 1972	57	20

8a CONTRACT OR GRANT NO DAHC19-69-C-0017	9a ORIGINATOR'S REPORT NUMBER(S)
b. PROJECT NO 012.302	RAC-CR-69
c	9b OTHER REPORT NO(S) (Any other numbers that may be assigned this report)
d	NONE

10 DISTRIBUTION STATEMENT

"Approved for public release; distribution unlimited."

11 SUPPLEMENTARY NOTES	12 SPONSORING MILITARY ACTIVITY
NONE	HQ, U.S. Army Materiel Command

13 ABSTRACT

As a task of the Major Item Management Study (MIMS), the Research Analysis Corporation has conducted a study to review the information systems that comprise the Army Management Information System (AMIS) Master Plan with regard to their potential interactions with the current major item management process as documented in RAC Client Report, "A Synthesis of the US Army Major Item Management System." The study first examines the AMIS systems with regard to their potential interaction with MIMS, and reviews the Logistics Management Information System (LOGMIS) as delineated under the Army Logistics System Master Plan (LOGMAP) with regard to including LOGMIS information systems not covered under AMIS in the analysis. Next, the information systems that are identified as having a potential interaction with the MIMS process are described in general terms, and the interaction of these systems with the MIMS process is briefly presented. The final chapter presents the relative importance of the AMIS subsystems to MIMS, and recommends that the current documentation of MIMS be utilized as a fundamental guidance document in the development of the Basic Extension of ALPHA (BETA) system.

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DD FORM 1473
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14 KEY WORDS	LINK A		LINK B		LINK C	
	ROLE	WT	ROLE	WT	ROLE	WT
ALPHA						
AMIS						
ARNGMIS						
AUTOSTRAD						
CS$_3$						
DLOGS						
DSU/GSU						
FDMIS						
LOGMAP						
LOGMIS						
major item management						
management information systems						
MIMS						
SAILS						
SALS						
SAMS						
SPEEDEX						

FOREWORD

This report documents a study undertaken for the U.S. Army
Materiel Command in fulfillment of the work statement for RAC study
012.302, Part I, Task III. The study's purpose was to review the
information systems that comprise the Army Management Information
System (AMIS) Master Plan with regard to their potential interactions
with the current major item management process as documented in
RAC Client Report, "A Synthesis of the U.S. Army Major Item
Management System (MIMS)." The results of this effort will (a) place
the proposed AMIS subsystems in perspective with regard to the current
MIMS process, and (b) provide a vehicle for detailed examination of
the AMIS subsystems with respect to data requirements, data flows and
reporting requirements.

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Director
Logistics Department

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ABBREVIATIONS

ACCIAIMS	Army COMSEC Commodity, Logistical, Accounting and Information Management System
ACEMIS	Army Communications-Electronics Management Information System
ACSFOR	Assistant Chief of Staff for Force Development
ADP	Automatic Data Processing
ADPE	Automatic Data Processing Equipment
AESRS	Authorized Equipment Status Reporting System
ALPHA	AMC Logistics Program Hardcore Automated
AMC	Army Materiel Command
AMC S&E	AMC Scientific and Engineering System
AMIS	Army Management Information System
AMP	Army Materiel Plan
AR	Army Regulation
ARDIS	Army Research and Development Information System
ARNGMIS	Army National Guard Management Information System
ASAC	Automated System for Army Commissaries
AUTOSTRAD	Automated System for Transportation Data
BASOPS	Base Operating Information System
BETA	Basic Extension of ALPHA
BOIMARS	Basis of Issue Monitoring and Recording System
BOIPS	Basis of Issue Planning System
CARMOCS	Continental Army and Major Oversea Command System
CCMIS	Commodity Command Management Information System
CIVPERSINS	Civilian Personnel Information System
CMDS	Commands
COADS	Command and Administration Data System
COEMIS	Corps of Engineers Management Information System

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COMSEC	Communications Security
CONARC	Continental Army Command
CONUS	Continental United States
COSCOM	Corps Support Command
CPU	Central Processing Unit
CSM	Chief of Staff Memorandum
CS_3	Combat Service Support System
DA	Department of the Army
DEPMIS	Depot Management Information System
DIMES	Defense Integrated Management Engineering System
DIV	Division
DLOGS	Division Logistics System
DOD	Department of Defense
DS	Direct Support
DSU	Direct Support Unit
FACTS	Force Accounting Terminal System
FAS	Force Accounting System
FASCOM	Field Army Support Command
FAST	Freight Automated System for Traffic Management
FCG	Functional Coordinating Group
FDMIS	Force Development Management Information System
FIMIS	Financial Management Information System
FPIS	Force Planning Information System
FSN	Federal Stock Number
FSNMDR	Federal Stock Number Master Data Record
FTR	Excess Disposition Card
G&R	Guidance and Reporting
GS	General Support
GSU	General Support Unit
HQ	Headquarters
IBM	International Business Machine Corporation
IDHS	Intelligence Data Handling System
IFMIS	Integrated Facilities Management Information System
IFS	Integrated Facilities System
ISSMIS	Integrated Support Services Management Information System

ITMIS	Integrated Transportation Management Information System
JUMPS	Joint Uniform Military Pay System
LOGMAP	The Army Logistics System Master Plan
LOGMIS	Logistics Management Information System
Maint	Maintenance
MATCOM	Materiel Command
MDR	Master Data Record
MEDMATS	Medical Materiel Management System
MEDMIS	Medical Management Information System
MIAS	Major Item Automated System
MIDA	Major Item Data Agency
MIDP	Major Item Distribution Plan
MILPERSINS	Military Personnel Information System
MIMIS	Major Item Management Information System
MIMS	Major Item Management System
MISD	Major Information System Directorate
MODS	Mobility Planning Data System
MO/M	Maintenance Operation/Management
MPM	Maintenance Program Management
MPMIS	Military Police Management Information System
MPOM	Maintenance Program Operations Management
MRHS	Materiel Request History and Status
MRO	Materiel Release Order
MTMTS	Military Traffic Management Terminal Service
NCR	National Cash Register Company
NGB	National Guard Bureau
NICP	National Inventory Control Point
OACSFOR	Office of the Assistant Chief of Staff for Force Development
OAVCS	Office of the Assistant Vice Chief of Staff
OIS	Operating Information System
PAC	Pacific
PASTRAM	Passenger Traffic Management System
PB	Property Book
PERMACAP	Personnel Management and Accounting Card Processor

RAC	Research Analysis Corporation
RADAR	Rapid Authorization Data Retrieval
RCMIS	Reserve Components Management Information System
REAMS	Resources Evaluation and Management System
SACS	Structure and Composition System
SAILS	Standard Army Intermediate Level Supply
SALS	Standard Army Logistics System
SAMRM	Standard Army Maintenance Reporting and Management System
SAMS	Standard Army Maintenance System
SASS	Standard Army Supply System
SIMS	Selected Item Management System
SPEEDEX	System-Wide Project for Electronic Equipment at Depots-Extended
SSN	Standard Study Number
TAADS	The Army Authorization Documents System
TAMMS	The Army Maintenance Management System
TARMOCS	The Army Operations Center System
TASCOM	Theater Army Support Command
TDA	Tables of Distribution and Allowances
TEAM-UP	Test, Evaluation, Analysis and Management Uniformity Plan
TERMS	Terminal Management System
TMCS	Tactical Maintenance Control System
TOE	Table of Organization and Equipment
TPMS	Technical Personnel Management Information System
UIC	Unit Identification Code
UIS	Unit Identification System
USAMC	United States Army Materiel Command
USAMIDA	United States Army Major Item Data Agency
USAREUR	United States Army Europe
USARPAC	United States Army Pacific
USPFO	United States Property and Fiscal Office
VTAADS	Vertical TAADS
WHIST	Worldwide Household Goods Information System for Traffic Management

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WWAP   Worldwide Asset Position

3S   Standard Supply System

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Chapter 1

INTRODUCTION

BACKGROUND

In early 1968, as directed by the Chief of Staff Memorandum (CSM 67-444) dated 13 November 1967, the Management Information Systems Directorate (MISD), Office of the Assistant Vice Chief of Staff (OAVCS), conducted the Study of Management Information Systems Support (SOMISS) within the Army.[1] As a result of this study the requirement for a continuing and dynamic Army Management Information System (AMIS) Master Plan was initiated. The AMIS Master Plan is the Army's primary long-range planning document for management information systems and ADPE support. The AMIS Master Plan is updated annually by OAVCS, MISD in coordination with the Army Staff and Major Army field commands. The objectives of the AMIS Master Plan are specified in AR 18-1 as follows:

    a. Define the master design and objectives of AMIS.

    b. Identify responsibilities for achieving objectives.

    c. Identify tasks required to achieve objectives.

    d. Establish priorities among identified tasks.

    e. Establish schedules for completion of tasks.

    f. Identify resource requirements to accomplish AMIS life cycle tasks.

    g. Establish the management procedures to be followed by HQ DA and the major Army field commands.

    h. Provide a basis for monitoring the design and development of the AMIS and insuring compliance with HQ DA guidelines.

In conjunction with the establishment of the AMIS Master Plan, Army Regulation 18-1,[2] "Management Information System-Policies, Objectives, Procedures, and Responsibilities," was revised in August 1971, to reflect the formal documentation and planning requirements for approval and

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development of proposed AMIS management information systems. The latest
publication of the AMIS Master Plan,[3] dated August 1971, included 36
separate information systems under the AMIS "umbrella". Since the
Master Plan is a dynamic planning tool, it can be anticipated that it
will be revised and updated as existing information systems move toward
implementation and as new system design concepts are approved for
development.

In parallel with the evolution of the AMIS Master Plan and its
associated information systems, the Research Analysis Corporation (RAC)
has been actively engaged in supporting the Army Materiel Command (AMC)
in the area of major item management analysis for the past four years.
During Workyears 1968 and 1969, RAC in coordination with AMC's Directorate
of requirements and procurement (at that time known as the
Directorate of Materiel Requirements) developed and prepared systems
design guidance for a Major Item Management Information System (MIMIS)
at the commodity command level within AMC. It was recognized, however,
that a comprehensive Major Item Management System (MIMS) must go beyond
the MIMIS concept and should include processes at all levels, e.g.,
Department of Army (DA), major commands, HQ AMC, etc.

In November 1970 a Functional Coordinating Group (FCG) was established
by HQ AMC to define and improve the existing MIMS. This system comprises
a large number of interrelated information subsystems, data bases, and
procedures. The MIMS concept is to embrace major item management
processes at all Army organizational levels (in contrast to the MIMIS
study, which directed its attention primarily to report outputs required
of commodity commands.) The FCG is composed of representatives and
observers from organizational elements of AMC that are directly concerned
with major item management.

In conjunction with the FCG effort to improve the existing MIMS,
RAC was tasked, as part of the work year 1972 Major Item Management
Study,[4] to document the current MIMS.[5] The objective of this work effort
was to provide the Army with documentation reflecting a synthesis of
the Army's major item management subsystems as they exist today. This
documentation relies on general logic diagrams to reveal the interrelations
of major processes, systems, and procedures of major item management.

The results of this effort (a) provides the Army with a sound basis for the evaluation of proposed improvements to MIMS and (b) serves as a needed educational tool and useful reference document for managers.

The following task under this Major Item Management Study[4] is to review the proposed information systems under the AMIS Master Plan with regard to their potential interaction with the current MIMS process.

OBJECTIVE

The objective of this study is to identify those AMIS Subsystems which interact with the current MIMS process, to briefly describe the nature of the interaction, and to associate an order of relative importance of the AMIS subsystems to MIMS. The results of this effort will (a) place the proposed AMIS subsystems in perspective with regard to the current MIMS process, and (b) provide a vehicle for detailed examination of the AMIS subsystems with respect to data requirements, data flows, and reporting requirements.

METHODOLOGY

The approach utilized in conducting the study consisted of a four-step process. The first step was to perform a general review of the AMIS Master Plan documentation to identify which of the AMIS systems will interact with the MIMS process. The second step involved the additional review of the Army Logistics Master Plan (LOGMAP)[6] to identify those systems currently under LOGMAP which have not been specifically identified at this time as separate AMIS systems, and which also interact with the current MIMS process. The third step was to compile a composite list of AMIS and potential AMIS systems for description with regard to their interaction with the MIMS process. The final step was to conduct a review of each system identified on the composite list with regard to their potential interface with MIMS.

The primary document sources utilized for the study were the AMIS Master Plan[3] and its related documentation of the individual AMIS systems,[3] the LOGMAP[6] and the RAC-developed Synthesis of the US Army Major Item Management System.[5] Other data sources included documentation on individual systems that had been prepared by the proponent and/or developing agencies.

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Additional information was obtained through discussions with AMC and DA personnel associated with the development of these information systems.

Chapter 2

IDENTIFICATION OF AMIS SYSTEMS INTERACTING WITH MIMS

GENERAL

In examining the AMIS systems list with regard to identifying
which systems will interact with the MIMS process, it is clear that
many of the AMIS systems are not applicable to the sphere of major
item management. In addition, a review of the AMIS systems in conjunc-
tion with the proposed Logistics Management Information System (LOGMIS)
(LOGMIS systems represent the logistics subset of AMIS systems) indicates
that there is not a direct one-for-one relationship between the LOGMIS
systems and the AMIS systems. Therefore, the first step in determining
the interaction of the AMIS systems with the MIMS process is to clearly
identify those AMIS systems which are concerned with major item management;
to structure those systems in such a manner that their relationship to
one another is clear; and to identify new LOGMIS systems that may come
under the AMIS in the future.

AMIS SYSTEMS [3]

The master plan for the design and development of the AMIS systems
is a dynamic plan which is continually undergoing revisions and updating
as systems concepts and development move toward implementation. The
most recently published list of AMIS systems,which consists of 36
separate systems,is presented in Table 1. This list is not structured
in any hierarhical manner and includes both vertical guidance and
reporting (G&R) systems and horizontal operating information systems
(OIS). The vertical G&R systems represent umbrella systems in their
respective functional areas (i.e., personnel, supply, maintenance, etc),
and are comprised of one or more OIS's. The horizontal OIS's represent
information systems which are designed for a specific organizational

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TABLE 1

AMIS SYSTEMS[3]

1. Army COMSEC Commodity, Logistical, Accounting and Information Management System (ACCLAIMS)
2. Army Communications-Electronics Management Information System (ACEMIS)
3. AMC Logistics Program Hardcore Automated (ALPHA)
4. AMC Scientific and Engineering Systems (AMC S&E)
5. Army Research and Development Information System (ARDIS)
6. Army National Guard Management Information System (ARNGMIS)
7. Automated System for Army Commissaries (ASAC)
8. Automated System for Transportation Data (AUTOSTRAD)
9. Base Operating Information System (BASOPS)
10. Continental Army and Major Overseas Command System (CARMOCS)
11. Civilian Personnel Information System (CIVPERSINS)
12. Corps of Engineers Management Information System (COEMIS)
13. Combat Services Support System (CS$_3$)
14. AMC Data Banks
15. Division Logistics System (DLOGS)
16. Direct Support Unit/General Support Unit (DSU/GSU)
17. Force Development Management Information System (FDMIS)
18. Financial Management Information System (FIMIS)
19. Intelligence Data Handling System (IDHS)
20. Integrated Facilities Management Information System (IFMIS)
21. Integrated Support Services Management Information System (ISSMIS)
22. Integrated Transportation Management Information System (ITMIS)
23. Joint Uniform Military Pay System (JUMPS)

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TABLE 1
(Continued)

24. Logistics Management Information System (LOGMIS)

25. Materiel Command (MATCOM)

26. Medical Management Information System (MEDMIS)

27. Military Personnel Information System (MILPERSINS)

28. Military Police Management Information System (MPMIS)

29. Personnel Management and Accounting Card Processor (PERMACAP)

30. Reserve Components Management Information System (RCMIS)

31. Resources Evaluation and Management System (REAMS)

32. System-Wide Project for Electronic Equipment at Depots-Extended (SPEEDEX)

33. The Army Operations Center System (TARMOCS II)

34. TASCOM Districts

35. Test, Evaluation, Analysis and Management Uniformity Plan (TEAM-UP)

36. USARPAC Standard Supply System (3S)

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level of implementation (i.e., DA, wholesale, intermediate, DSU/User, etc.).

Since many of the AMIS systems are not associated with major item management (e.g., CIVPERSINS), this list of 36 AMIS systems can be narrowed down to only those systems which are concerned with major item management prior to the structuring of these systems into a meaningful hierarchical pattern. The list of AMIS systems presented in Table 2 represents those AMIS systems that are concerned with major item management functions. Figure 1 presents those systems with regard to their hierarchical position in the management structure of the Army. It should be noted that one additional system, the Standard Army Intermediate Level (SAILS) system has been added to Fig. 1 at the intermediate level under LOGMIS. SAILS, as indicated by the dashed box in Fig. 1, is included because a recent AMIS master plan change [7] that has not yet been published indicates that SAILS will replace the five AMIS systems that are structured under the SAILS box (i.e., CS_3 CORPS, MATCOM, TASCOM Districts, 3S, and BASOPS).

The relationship of the vertical G&R system (i.e., LOGMIS and ITMIS) with horizontal OISs can be seen in Fig. 1, and will be elaborated on in the following section of this chapter where LOGMIS is discussed in greater detail. One additional point that is apparent in Fig. 1 is that only two of the AMIS systems which impact the MIMS process fall outside the umbrella of LOGMIS. This is to be expected because the primary functions of major item management fall into the logistics management category which LOGMIS is designed to encompass.

LOGMIS SYSTEMS[6]

LOGMIS is the overall system that has been structured to provide for the development and implementation of the Standard Army Logistics System (SALS) under the Army Logistics System Master Plan (LOGMAP). SALS represents the concept of standardization of the logistics system and, as such, represents a goal which the Army is moving toward, while LOGMIS represents the system for accomplishing the SALS concept. It should be emphasized that LOGMIS, like AMIS, is not an information system per se but rather it represents a structure of logistics-oriented information systems. Figure 2 presents the formal LOGMIS matrix as shown in the latest LOGMAP documentation.

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TABLE 2

AMIS SYSTEMS INTERACTING WITH MIMS

1. ALPHA
2. ARNGMIS
3. AUTOSTRAD
4. BASOPS
5. CS_3
6. DLOGS
7. DSU/GSU
8. FDMIS
9. ITMIS
10. LOGMIS
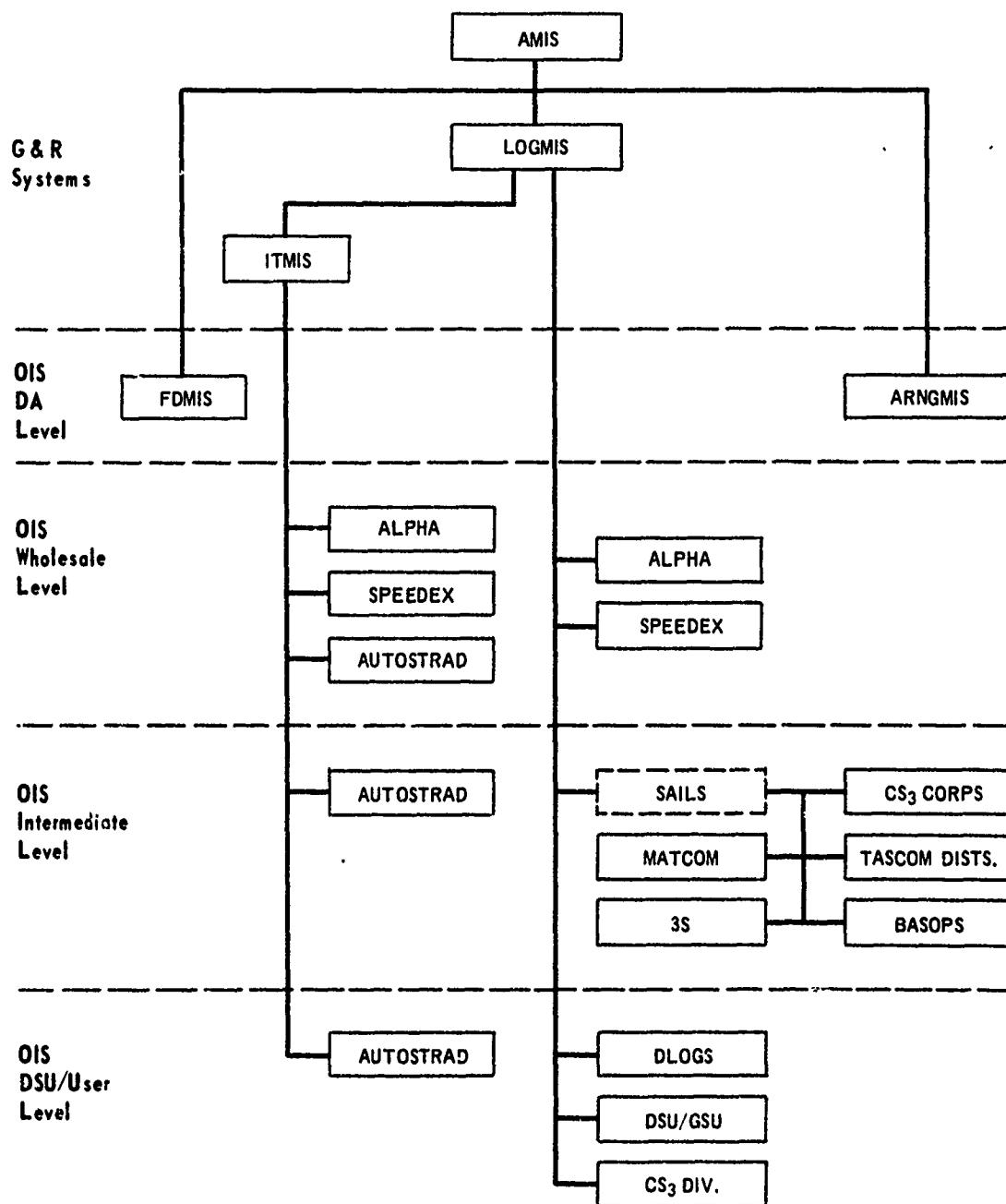11. MATCOM
12. SPEEDEX
13. TASCOM DISTRICTS
14. 3S

Fig. 1—Hierarchical Structure of the Major Item Related AMIS Systems

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LOGMIS encompasses the five major functional areas of Army
logistics management: supply, maintenance, transportation, support
services, and facilities. For each of these functional areas there is
a vertical G&R system designated to be responsive to the requirements
of that functional area (i.e., Standard Army Supply System (SASS),
Medical Materiel Management System (MEDMATS), Standard Army Maintenance
System (SAMS), ITMIS, ISSMIS, and Integrated Facilities System (IFS)).
However, as in the case of the AMIS systems, not all of these functional
areas encompass major item management activities. Therefore, Fig. 3
presents a simplified structure of those LOGMIS systems which interact
with the MIMS process.

In reviewing elements of LOGMIS as presented in Fig. 3 and the
elements of LOGMIS as delineated under AMIS in Fig. 1, it is clear that
the two structures are not fully compatible. However, as will be shown
in the following paragraphs, the difference between the two structures
are primarily differences resulting from the orientation of the AMIS
Master Plan versus the orientation of LOGMIS under LOGMAP. The AMIS
Master Plan primarily addresses Army information systems that are
nearing implementation and require installation of systems hardware.
The LOGMAP, on the other hand, addresses information systems that are
nearing implementation as well as those in the conceptual stage of
development. Therefore, it is to be expected that the LOGMIS structure
under LOGMAP includes a number of conceptual systems under development
that have not advanced far enough for inclusion under the AMIS Master Plan.

Under the AMIS structure (Fig. 1) the only vertical G&R system
depicted under LOGMIS is ITMIS, while under the LOGMIS structure (Fig. 3)
there are three G&R systems: SASS, SAMS, and ITMIS. Currently SASS
and SAMS have not been sufficiently defined or developed to warrant
separate treatment as unique AMIS systems. AMIS does, however, describe
SASS and SAMS (SAMS was previously called SAMRM) as G&R systems in the
LOGMIS documentation.

The Headquarters Operating Information System (HQ, OIS) as depicted
in Fig. 3 is not included in the AMIS master plan. HQ, OIS is currently
only a concept for reporting wholesale level information to the DA
level. The concept of HQ OIS is to utilize the information developed

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STANDARD ARMY LOGISTICS SYSTEM (SALS)

GUIDANCE & REPORTING SYSTEMS ←------------------------→

LOGISTICS MANAGEMENT INFORMATION SYSTEM (LOGMIS)

ECHELON	FUNCTIONS	SUPPLY — STANDARD ARMY SUPPLY SYSTEM (SASS)				MAINTENANCE			TRANS	SPT SVCS	FACILITIES
		CLASS I	CLASS III BULK	CLASS V (SAAS)	OTHER SUPPLY CLASSES	*MEDICAL MATERIEL MGT SYSTEM (MEDMATS)	STANDARD ARMY MAINTENANCE SYSTEM (SAMS)	*MEDICAL MATERIEL MGT SYSTEM (MEDMATS)	INTEGRATED TRANSPORTATION MANAGEMENT INFO SYS (ITMIS)	INTEGRATED SPT SERVICES MANAGEMENT INFO SYS (ISSMIS)	INTEGRATED FACILITIES SYSTEM (IFS)
HQ DA	SEL MGMT	HQ OIS	HQ OIS	HQ OIS	HQ OIS	HQ OIS	HQ OIS	HQ OIS	HQ OIS	HQ OIS	HQ OIS
WHOLESALE	MGMT	ACMA	ACMA	CCMIS DEPMIS	CCMIS/DEPMIS	ACMA	CCMIS/DEPMIS	ACMA	CCMIS		IFS
	OPNS			SPEEDEX	ALPHA/BETA SPEEDEX		ALPHA/BETA SPEEDEX		AUTOSTRAD ALPHA/BETA SPEEDEX	SPEEDEX	
INTER-MEDIATE	SEL MGMT — CONUS THEATER MTMTS		MANUAL	SAAS	SAILS	MEDMATS	SAMS	MEDMATS	AUTOSTRAD TRAMMS		
	MGMT — SUB-COM COSCOM INSTALLATION	COMMISSARY SYSTEM	MANUAL	SAAS	SAILS	MEDMATS	SAMS	MEDMATS	AUTOSTRAD TRAMMS	ISSMIS	IFS
	OPNS — DEPOT GSU INSTALLATION		MANUAL	SAAS	SAILS	MEDMATS	SAMS	MEDMATS	AUTOSTRAD TRAMMS		
DSU/USER	DIV OPNS	MANUAL	MANUAL	SAAS	DLOGS/CS3	MANUAL	SAMS	MANUAL		ISSMIS	IFS
	NON DIV OPNS	MANUAL	MANUAL	SAAS	NCR 500	MANUAL	SAMS	MANUAL			

OPERATING INFORMATION SYSTEMS ←------------------------→

● MEDMATS (MEDICAL MATERIEL MANAGEMENT SYSTEM) A SUBSYSTEM OF MEDMIS (MEDICAL MANAGEMENT INFROMATION SYSTEM) – MEDICAL LOGISTICS COMPATIBLE WITH STANDARD ARMY LOGISTICS SYSTEM, WITH STAFF SUPERVISION IN ACCORDANCE WITH AR 10–5
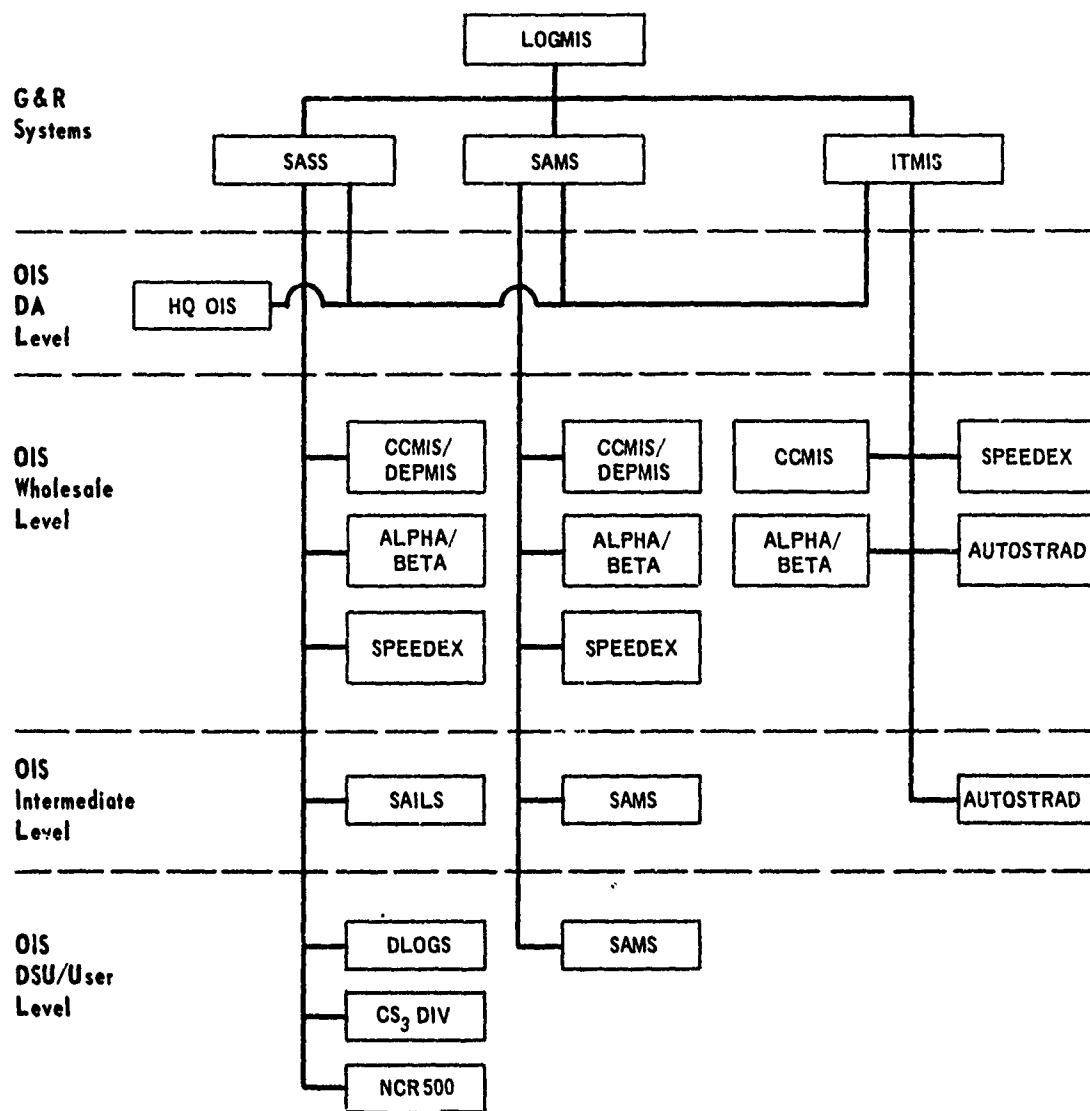
Fig. 2—LOGMIS Matrix under LOGMAP
(Ref 6, Vol I, p 11)

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Fig. 3—Hierarchical Structure of the Major Item Related LOGMIS Systems

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by the wholesale level information systems to satisfy the headquarters level reporting requirements.

At the wholesale level, the LOGMIS structure (Fig. 3) includes the Commodity Command Management Information System and the Depot Management Information System (CCMIS/DEPMIS) which are also omitted from the AMIS structure (Fig. 1). As with the HQ OIS case previously described, the CCMIS/DEPMIS systems are only in the conceptual stages of development at this time and therefore have not been addressed by the AMIS Master Plan. Basically the CCMIS/DEPMIS systems are internal management information systems for the commodity commands and CONUS Depots, respectively. These systems will utilize the planned data bases of ALPHA and SPEEDEX, respectively, as their primary data sources. The CCMIS/DEPMIS systems will contain additional software programming to provide for internal management reporting which will be utilized to monitor performance of the commodity commands and CONUS Depots activities.

It should also be noted that in Fig. 3 the Basic Extension of ALPHA (BETA) system is shown in the same systems box with the ALPHA system. BETA is not part of the AMIS Master Plan; however, BETA is discussed as the follow-on pahse of ALPHA in the AMIS documentation on ALPHA.*

At the intermediate level and the DSU/User level the SAMS system is depicted as a distinct system in the LOGMIS structure (Fig. 3), while it is omitted under the. AMIS structure (Fig. 1). As indicated above SAMS is not addressed as a separate AMIS system; however, it is anticipated that in the near future SAMS will be treated as a separate AMIS system.

Finally, at the DSU/User level, the LOGMIS structure (Fig. 3) includes the "NCR 500 system," while the AMIS structure includes the "DSU/GSU system." The two terms refer to the same system and do not represent an inconsistency between the AMIS plan and the LOGMIS plan.

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* Special note should be made that the Centralized Integrated System for the International Logistics (CISIL) system is not discussed in this report because it is not formally under AMIS or LOGMIS. However, the CISIL system is under development as part of the BETA system and should be reviewed with regard to MIMS upon incorporation under LOGMIS or AMIS.

The following section of this chapter summarizes the results of the AMIS versus LOGMIS comparison presented above and provides the combined list of the LOGMIS (under LOGMAP) and AMIS systems which will be described with regard to their interaction with MIMS in the following chapter.

AMIS SYSTEMS INTERACTING WITH MIMS

The preceding sections have presented both the AMIS systems which interact with MIMS and the LOGMIS systems under LOGMAP which interact with MIMS. The LOGMIS systems have been included in this analysis because, as indicated above, they include new systems which will come under the AMIS in the future.

In order to determine which information systems should be discussed individually with regard to their interaction with MIMS, the distinction between G&R systems and OISs should be examined first. G&R systems are not unique information systems but rather represent a functional umbrella of individual OIS systems. Since the presentations of the individual OISs under a G&R functional category will cover all of the G&R system interactions with MIMS, it is believed that the G&R systems do not warrant separate discussions. Therefore, the list of AMIS systems interacting with MIMS consists solely of OIS projects.

The final consideration in the section of AMIS systems is the determination of which LOGMIS systems, as presented in LOGMAP, are sufficiently developed to be included with the original AMIS list. In this regard it is believed that both SAILS and SAMS (at the intermediate and user level) should be included in the list of AMIS systems because of their advanced state in the development cycle.

The AMIS systems interacting with the MIMS that will be discussed as unique systems in the following chapter are:

(a)	ALPHA	(f)	ARNGMIS
(b)	SAILS	(g)	AUTOSTRAD
(c)	SPEEDEX	(h)	DLOGS
(d)	SAMS	(i)	DSU/GSU
(e)	FDMIS	(j)	CS_3/Div

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Chapter 3

A DESCRIPTION OF THE AMIS SYSTEMS INTERACTING WITH MIMS

GENERAL

As indicated in Chap. 2, a number of AMIS systems interact with the current MIMS process. In some cases this interaction is extensive and in other cases only minimal. In the following sections of this chapter, each of the AMIS systems which interact with the current MIMS process is described individually, first in terms of what the system is and second in terms of the interaction with the current MIMS process.

ALPHA/BETA[3,8,9]

Description

The AMC Logistics Program Hardcore-Automated (ALPHA) system is a command-unique standardized system for the wholesale inventory management operation at the NICP/commodity command level within USAMC (Ref 3, ALPHA Vol, Pl). The Basic Extension of ALPHA(BETA) system is the follow-on incremental development phase of the ALPHA system. The ALPHA system is designed to fulfill the requirements for standardization of the logistics function at the wholesale level and as such is considered an integral part of LOGMIS. ALPHA is the first increment of the commodity command portion of the AMC 5-year ADP Program. The primary subsystems of ALPHA are: supply management, maintenance, procurement and production, provisioning, stock control, financial management and cataloging.

The fundamental principle utilized in the system design of ALPHA is the integration of data to minimize the number of data files. As a result the core of the ALPHA system is the Federal Stock Number Master Data Record (FSNMDR) file. This file, which consolidates data across the spectrum of ALPHA subsystems, is structured into sectors

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which are oriented to subfunctions. The subfunctions are further stratified by the use of additional supporting files, tables, and indexes.

Whenever possible, all data elements which are relatable to a key data element, such as the FSN, are stored on-line to be available for all users. In addition, many of the routine item management decisions have been programmed to be made automatically by the computer, thus freeing the item manager to focus more time on exception cases.

ALPHA/BETA and MIMS

The ALPHA system is designed to satisfy the operational functions of inventory management at the wholesale level. In performing this role, ALPHA does not distinguish between secondary and major items of equipment. The majority of the data in ALPHA are stored and processed at the FSN level. As a result many of the routine aspects of inventory management for major items are intended to be accomplished by the ALPHA system. The primary inventory management activities covered in ALPHA which interact with the major item management process occur in the procurement and production, stock control, and cataloging subsystems of ALPHA. The other subsystems of ALPHA (supply management, maintenance, provisioning, and financial management) will have only a relatively small impact on the MIMS process.

There are a number of processes unique to major item management at the commodity commands which do not fall under the scope of the current ALPHA system. Under the BETA concept, which represents the follow-on development of ALPHA, the major item unique processes at the wholesale level are intended to be automated through the implementation of the Major Item Automated System (MIAS). The MIAS system will directly interface with the existing ALPHA data elements and files. In fact, under the MIAS systems design concept, ALPHA's primary data file, the FSNMDR, will contain a separate data sector to satisfy major item unique information requirements.

One of the more significant unique major item requirements to be addressed by MIAS is the need to process data at the Standard Study Number (SSN) level (as opposed to the FSN level). The two principal planning documents required for major item management, as indicated in the MIMS documentation, are the Army Materiel Plan (AMP)-Part I, and the

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Major Item Distribution Plan (MIDP). Each of these documents is prepared at the SSN level and cannot be derived from the current ALPHA data files.

In summary, ALPHA is intended to provide for the standardized automation of a number of routine inventory management aspects of major item management at the wholesale level. However, many of the more important major item management activities at the wholesale level will not be accommodated by the current ALPHA system. Presently, the future plans for expanding ALPHA into the BETA development increment and the subsequent development of MIAS under BETA are intended to provide for a fully automated system at the commodity commands for managing major items of equipment. The interaction of MIAS with MIMS will be very significant. The current system concept of MIAS encompasses directly or indirectly nearly all of the activities of major item management as presented in MIMS. MIAS however at this point in time is only in its embryonic stage of development, is currently being held in abeyance, and is not scheduled for full scale development for some time to come. The MIMS documentation should be used as a fundamental input in the future development of MIAS.

SAILS [7,10,11]

Description

The Standard Army Intermediate Logistics System (SAILS) is the standard Army automated supply system for all supply support operations between the wholesale support level in CONUS and the direct support/ user level in CONUS and oversea. SAILS will replace the present supply subsystems of BASOPS, MATCOM, TASCOM Districts, USARPAC 3S and CS_3 Corps. SAILS is essentially a software redesign and standardization effort that utilizes the best supply software of existing systems along with the development of additional software to accommodate voids that exist in the current systems. SAILS is intended to interface with the DSU/ GSU, DLOGS, and CS_3 Div. systems at the DSU/User level, and interface with the ALPHA/BETA and SPEEDEX systems at the wholesale level.

SAILS is being developed on an incremental basis to support three principal levels of supply activity: Selective Management (A-Level), Supply Management (A Level), and Support Operations (B Level).

In order to accommodate existing organizational structures and to facilitate development and implementation of SAILS in a time-phased, orderly manner, SAILS is being developed in five separate system packages. These five system packages are (1) CONUS Level A/B; (2) Oversea Level A/B, (3) Worldwide Level A(-); (4) Oversea Depot Level B; and (5) COSCOM Management. (Refer to Table 3 for a description of these packages.)

SAILS and MIMS

As indicated above, SAILS provides for a standardized automated system for supply management at the intermediate level. The primary major item oriented activities that are intended to be performed under SAILS at this level are: processing and forwarding of requisitions, asset control reporting, excess reporting, and loss/loss recovery reporting. Under the SAILS concept all of these functions will be automated with the CONUS A/B package and the Oversea A/B package software. Since major items fall into the cagegory of requiring "Selective Item Management" (as defined under the SAILS concept), the two SAILS A/B packages (CONUS and Oversea) are intended to provide major item inputs to the SAILS (A-) level package. The SAILS (A-) level package software is intended to provide summarized management information for theater management of major items as well as providing major item data to the NICPs and MIDA.

Of the major item management activities to be automated under SAILS, the function of asset control and reporting will have the only major impact on the MIMS process. The SAILS concept proposes the use of the Property Book (PB) reporting system/Authorized Equipment Status Reporting System (AESRS) at the SAILS A&B levels and the USAREUR MATCOM Asset Control System for the SAILS A(-) level.[11] The system revolves around the item detail master file which contains The Army Authorization Documents System (TAADS) authorization and inventory on-hand data for the units subordinate to the A(-) level. Changes in status to the on-hand assets are fed to a A(-) level via item detail cards for automated units, or annotated listings from non-automated systems.

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TABLE 3

DEFINITION OF SAILS SYSTEM PACKAGES (Ref 7, p 2)

CONUS LEVEL A/B PACKAGE — The SAILS package is designed to replace the BASOPS I supply application. Principal functions include supply management and stock operations, including storage. This package is also referred to as BASOPS II.

OVERSEAS LEVEL A/B PACKAGE — This SAILS package is designed to replace the USAREUR MATCOM and the USARPAC 3S systems. Principal functions include supply management and stock control operations, including storage, as they apply to the intermediate support level overseas. This package will also be used by COSCOMs having a GS supply support mission.

WORLDWIDE LEVEL A(-) PACKAGE — This SAILS package is designed to support selective management functions at the Theater/CONARC level. Specific functions include SIMS, Excess Management, Requirements and Performance, Analysis, Contingency Support Planning, Provisioning Coordination and Retrograde Control.

OVERSEAS DEPOT LEVEL B PACKAGE — This SAILS package is designed to support limited stock control and storage operations at the depot complex level in USAREUR. Depots will process requisitions against memorandum stock records, and formal accountability will be at USAREUR MATCOM. Use of this package requires modification of the Level B functions integral to the O/S Level A/B package installed at USAREUR MATCOM.

COSCOM MANAGEMENT PACKAGE — This SAILS package is designed to support COSCOM management over Corps DSU operations. The USAREUR COSCOM Management System will be used as a baseline for this application.

NOTE: Development of Overseas A/B and Worldwide A(-) is combined as the SAILS Priority II effort. Many requirements for these packages interrelate. Incremental completion of this effort is planned. The first increment will result in the Level A(-) package to be installed at HQ USARPAC. Completion of both increments will result in composite Overseas A/B and Worldwide A(-) packages to be installed at MATCOM USAREUR. The second increment will also result in the Overseas Level A/B package to be installed in the PAC subcommands.

Such information as authorization item description and unit identification are provided by existing DA broadcasts, i.e., the DA TAADS broadcast[*] for USAREUR, SB 700-20 for equipment description, and the unit identification system. Figure 4 provides a generalized flow chart of the planned SAILS asset control and reporting system.

SPEEDEX[3,6,12]

Description

The System-Wide Project for Electronic Equipment at Depots-Extended (SPEEDEX) is a standard USAMC depot operating information system. The intent of SPEEDEX is to increase standardization among AMC depots and also provide the integrated data base needed for reporting information through the vertical G&R systems at all levels, i.e., depots, commodity commands, HQ USAMC and HQ DA. In addition, SPEEDEX provides for increased internal (depots) real-time processing, and where cost effective, automation of existing manual systems.

When fully operational SPEEDEX is intended to provide a standard system to meet all operating, management, and reporting requirements of depot supply distribution, maintenance, financial, and control systems. The application of SPEEDEX to the various activities related to these functions is shown in Table 4. The activities related to the supply distribution system represent the hardcore applications of SPEEDEX, i.e., those activities considered to be the most in need of improvement. The activities related to the other depot functions are SPEEDEX follow-on applications.

Figure 5 shows the SPEEDEX ADPE configuration and its use in the issue and shipment planning processes. As indicated SPEEDEX provides for a remote communications capability between the operating sites and the Central Processing Unit (CPU). In addition to this type of internal communications there is the communication link between the depots and such agencies as MIDA.

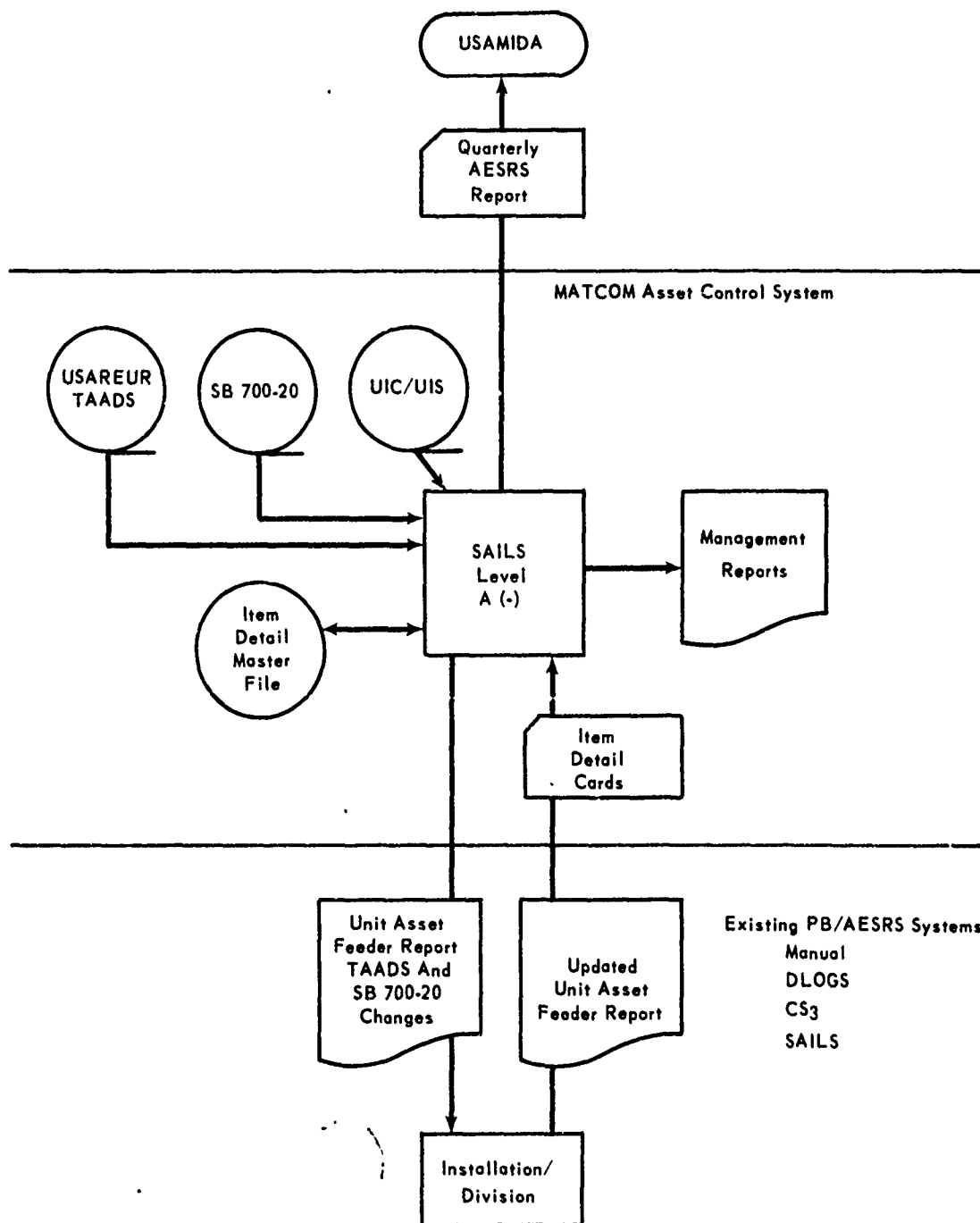[*] Note that USAMIDA is also furnished a monthly TAADS tape for the entire Army.

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Fig. 4—TAADS/PB/AESRS System

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TABLE 4

APPLICATION OF SPEEDEX TO DEPOT FUNCTIONS (Ref 6, Vol IV, p 2-11)

Depot Supply Distribution Functions

- Shipping
- Receiving
- Inventory, Adjustment and Location Audit
- Scheduling and Control (Ammunition surveillance, preservation and packaging, assembly and disassembly)

Depot Maintenance and Financially Oriented Functions

- Maintenance Production Planning and Control
- Expense Appropriation Management and Army Industrial Fund for Maintenance
- Defense Integrated Management Engineering System (DIMES)
- AMC Installation Division Stock Fund and Nonstock Fund Accounting
- Procurement History
- Installation Supply Accounting
- Facilities Engineering Work Management
- Payroll and Leave Accounting

Depot Control Functions

- Quality Assurance and Quality Control
- Calibration
- Management of Installation Operating Equipment
- Accounting for In-Use Non-Expendable Property
- Civilian Personnel Management Information System

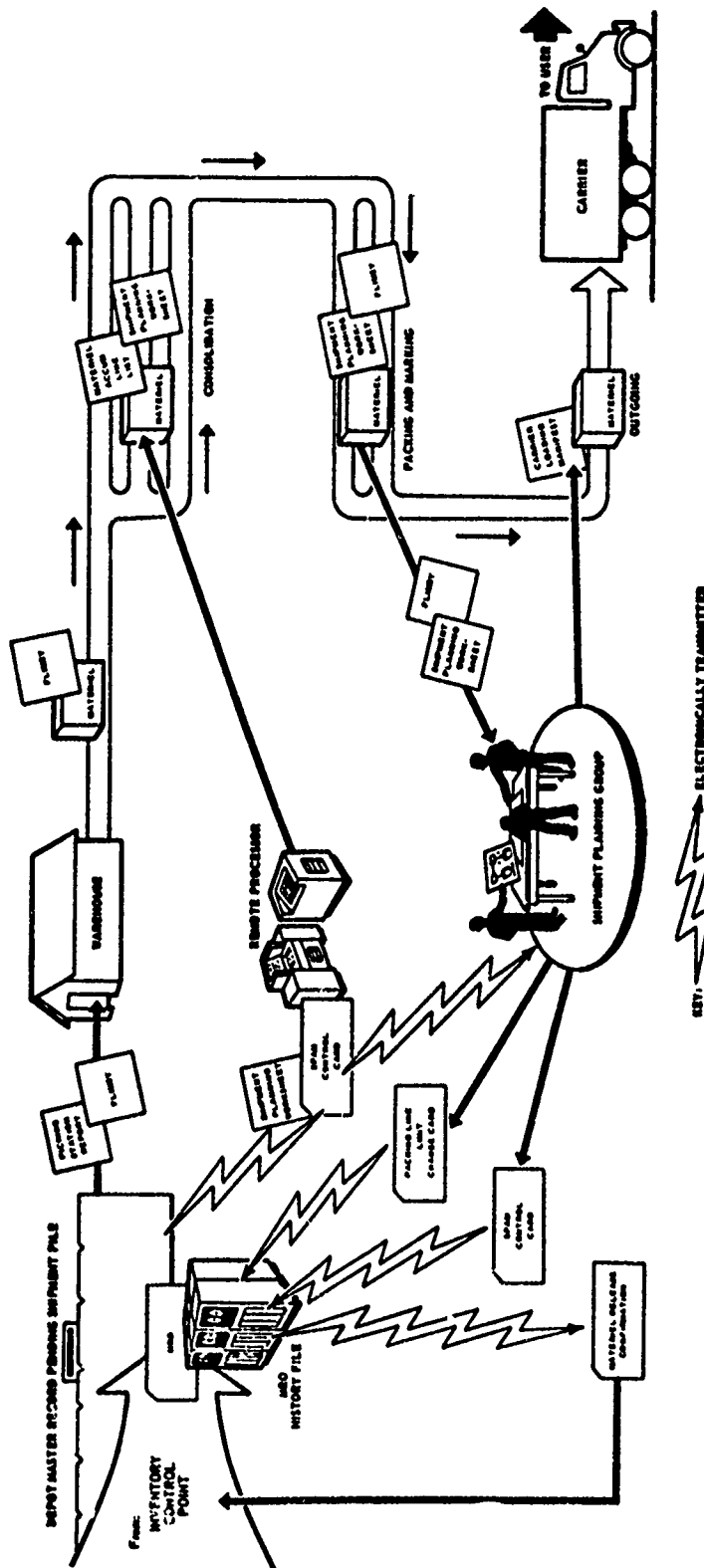Fig. 5—SPEEDEX ADPE and the Depot Issue
and Shipment Planning Process (Ref 6, Vol III, p 2-12)

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SPEEDEX and MIMS

Each of the SPEEDEX hard core applications, i.e., shipping, receiving, storage management, and scheduling and control affect major item management. In the functional areas of shipping and receiving the major improvement is intended to be the more timely reporting of the related information to the commodity commands. SPEEDEX as applied to storage management is intended to provide marginal improvement in the location audit activity. In the areas of inventory and adjustment actions, the SPEEDEX system is intended to provide improved control of depot activities and more accurate and timely reporting of asset information to the NICPs. The scheduling and control process of the depots' supply distribution system presents a major problem in the current management of major items. The standardized, automated system of SPEEDEX is intended to provide the means of better control and more accurate and timely data on asset control. The SPEEDEX hard core application will directly interact with the distribution and maintenance functions of MIMS and indirectly with the acquisition functions.

The maintenance production planning and control follow-on applications of SPEEDEX will be of primary interest to MIMS. The improved control of these activities coupled with the centralized workloading activity at MIDA is intended to improve the present MIMS system by providing a more timely interchange of information between MIDA and the depot maintenance performing activity. The relation of SPEEDEX to depot maintenance activities is discussed in the following section pertaining to SAMS.

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SAMS[6,13,14]

<u>Description</u>

The Standard Army Maintenance System (SAMS) provides for automation and standardization of the maintenance management functions at each level of the Army management structure. SAMS represents both a vertical G&R system and individual horizontal OISs. Because of this unique feature, the definition of the horizontal OISs under SAMS is somewhat inconsistent in the documentation relating thereto. Specifically under LOGMAP, SAMS is the G&R system for maintenance functions with ALPHA/BETA and SPEEDEX at the wholesale level, and at the intermediate and DSU/User levels is the horizontal OISs (refer to Fig. 2). However, in Fig. 6 on the following page, which is presented in the latest published General Systems Description (May 72) on SAMS, the horizontal OISs at the wholesale and DSU/User levels are represented at The Army Maintenance Management System (TAMMS) and The Tactical Maintenance Control System (TMCS). The potential difference between these two publications appears to be only one of nomenclature definitions. The SAMS category at the intermediate and user levels is used in LOGMAP in much the same manner as SAILS, where SAILS represents the incorporation of existing individual systems under the aegis of a newly standardized system.

Figure 6 presents the Army's management and organizational structures related to the management levels of SAMS and the operating information systems which comprise SAMS. In addition to the operating systems indicated in Fig. 6, SAMS will interface with other AMIS systems including ISSMIS, SAILS, CS3 (Div), and DLOGS. At HQ DA and DSU/User management levels there is a single category of maintenance management, referred to as "staff" at HQ DA level and "operations" at the DSU/User level. However, at the wholesale and intermediate levels there are three categories of maintenance management: Maintenance Program Management (MPM), Maintenance Program Operations Management (MPOM), and Maintenance Operations/Management (MO/M). In relation to SAMS these levels of maintenance management are described as follows:

a. MPM is that function of SAMS concerned primarily with developing command maintenance programs, providing command policy direction, determining overall resource requirements suballocating funds and assessing

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Fig. 6—SAMS Organization/Management-Level Relationship (Refer 13, p F-3)

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the command maintenance accomplishment in terms of materiel readiness and cost. The functions of this maintenance level are assigned to and normally will be accomplished within the headquarters of major Army commands, e.g., CONARC, USAREUR, and AMC.

b. MPOM is that function of SAMS concerned with program and production planning to meet maintenance requirements and the control of program performance in maintenance activities. The functions of this maintenance level are to be performed by subordinate commands that provide detailed program guidance and direction to operating elements.

c. MO/M is that function of SAMS responsible for the day-to-day accomplishment of maintenance in compliance with program direction and guidance received from the MPOM level. The functions of this level are related directly to the operations of maintenance activities, i.e., depots, DSU/GSU, and maintenance support shops.

The overall objective of SAMS is to be met by establishing a group of eleven basic functional modules, as listed in Table 5. These basic functions exist at all management levels. While SAMS is subdivided into eleven modules, these modules are not separable from a data processing viewpoint. Each module, except Equipment Usage, is dependent on at least one other module for part of its data elements. Within the functional concept of SAMS, the primary data base for maintenance information will be established and maintained at the lowest management level that can efficiently and economically provide the necessary ADP support.

Of the operating systems shown in Fig. 6 at the intermediate level of the management structure, TAMMS is operational and TMCS is under development. TAMMS is a reporting system for the control, operation, and maintenance of essentially all Army equipment.[15] The system is manual in its concept of operation. The small amount of automation that has been added permits increased response to the national level maintenance managers. TMCS, prepared for use in USAREUR now and possibly as an interim standard system for worldwide use in the future, is a limited capability system. It is designed for the purpose of managing and controlling maintenance operations at the direct support and general support levels. Although limited in scope, this system standardizes maintenance operations procedures and improves managerial controls by

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Table 5

SAMS FUNCTIONAL MODULES (Ref 13, p 7-5)

1. Materiel Readiness Reporting
2. Modification Work Order Program
3. Workload Accounting and Manpower Management
4. Maintenance Program and Budget
5. Maintenance Float Management
6. Maintenance Engineering Support
7. Calibration Program
8. Customer Support
9. Equipment Usage
10. Shop Supply/Part Requirements
11. Recovery, Collection, Classification

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supplementing manual reporting with automated data processing equipment. The objectives of both systems, TAMMS and TMCS, include (a) assessment of equipment performance, (b) determination of the adequacy of maintenance resources, and (c) evaluation of maintenance operations effectiveness.

At the wholesale level, the major OIS's which fall under the SAMS G&R system umbrella are ALPHA/BETA and SPEEDEX. ALPHA/BETA and SPEEDEX systems are discussed in the previous sections of this chapter; however, those portions pertaining to SAMS are noted here. When SPEEDEX is applied to the depot maintenance process, the functions of (a) workload planning, (b) maintenance shop schedules, (c) forecasting of parts for maintenance, (d) procurement history and contract administration, and (e) update of the maintenance data bank will be automated under SPEEDEX. The automation of these functions is intended to provide more timely and accurate maintenance data input to the commodity commands and MIDA data files in a format tailored to that agencies' needs.

The key functional features of ALPHA/BETA pertaining to SAMS are (a) maintenance planning, (b) overhaul consumption data, (c) parts explosion, and (d) the depot maintenance parts requirements list. When implemented, the maintenance planning segment of ALPHA/BETA will contain seven years of programming data. This data will serve as the basis for the preparation of the Army Materiel Plan-Part II. The overhaul consumption data segment of ALPHA/BETA will provide an automated data base used in forecasting quantities of repair parts required to support programmed maintenance. Based in part on information developed by the overhaul consumption data segment, the parts explosion segment of ALPHA/BETA computes repair parts requirements to support depot level maintenance programs. The depot maintenance parts requirement list segment is a computer list showing the quantity of each repair part required to support the repair/overhaul of any specified number of reparable items.

SAMS and MIMS

The interaction of SAMS with MIMS is determined by examining the functional modules of SAMS. Of the eleven functional SAMS modules, the following

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are the most directly related to major item management: Workload
Accounting and Manpower Management, Maintenance Program and Budget,
Maintenance Float Management and Equipment Usage.

Under the SAMS concept, the Workload Accounting and Manpower
Management function at the MPM wholesale and intermediate levels includes
the maintenance of total resource requirements and provides HQ DA with
command requirements. At the MPOM wholesale and intermediate levels,
resource requirement data are maintained, work priorities provided, and
exception data summarized and forwarded to the MPM level for evaluation
and decision. Work force control, work accomplishment records, and
standards validation represent the activities of this function at the MO/M
level. Under SAMS this aspect of maintenance in relation to major item
management would be subject to better control and would affect an improve-
ment in the management of the items.

The Maintenance Program and Budget function as presented in the
SAMS concept does not appear to envision any change in the present
method. That is, the objectives, program and funds are intended to be
provided by the HQ DA level, the MPM and MPOM levels are intended to
allocate and suballocate the funds and provide guidance, and the MO/M
level is intended to provide detailed budget data and source data for
costing purposes.

SAMS places emphasis on the Maintenance Float Management data to
be collected and utilized by the several management levels. Maintenance
float utilization is to be evaluated at the MO/M level; summarized
condition and utilization status is to be maintained by the MPOM level;
and periodically, MPOM will summarize these data and submit reports to the
MPM level. MPM will use these data to determine requirements and
establish priorities for use, distribution/redistribution, and to
evaluate the effectiveness of the float policy. Inasmuch as maintenance
float is a factor in the development of major item requirements, SAMS is
intended to provide the means to collect, control, and evaluate these data
at all management levels and in doing so improves this aspect of major
item management.

The final functional module that interacts with the maintenance
aspect of major item management is Equipment Usage. Data provided
by this function are used to determine the items of equipment that are

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candidates for replacement or overhaul. The simplified and standardized procedures and the use of automation in developing these data for the different management levels indicated in the SAMS concept should improve both the accuracy and timeliness of the data. An improvement in the reporting of these data is intended, in turn, to improve the accuracy of the data used to develop the AMP-Parts I and II.

FDMIS[3,16]

Description

The primary objective of the Force Development Management Information System (FDMIS) is to provide the Office of the Assistant Chief of Staff for Force Development (OACSFOR) and other staff members at HQ DA and other command echelons with accurate and timely force information for use in resource management and the development and control of force structure, authorizations and requirements (Ref 3, FDMIS Vol, p 1). The system includes at HQ DA the major subsystems: Force Accounting System (FAS), The Army Authorization Document System (TAADS), The Tables of Organization and Equipment (TOE) System, the Basis of Issue Planning System (BOIPS), and the Structure and Composition System (SACS). In addition the following subsystems/models are included as part of FDMIS: The Basis of Issue Monitoring and Recording System (BOIMARS), the Force Accounting Terminal System (FACTS), the Rapid Authorization Data Retrieval (RADAR) System, the Battalion Slice Model, the Force Planning Information System (FPIS), and the Automated Manpower Requirements and Utilization System (ACSFOR 78).

FDMIS represents both a vertical G&R system and a horizontal OIS system. It is a vertical G&R system because it represents a composite of subsystems that with the implementation of the planned Vertical TAADS (VTAADS) will extend through all of the major echelons of the Army's management structure. It is a horizontal OIS because its primary use is to provide HQ DA with force structure planning information.

The major subsystems which comprise FDMIS, as stated above, are at the HQ OIS level. The FAS is a multiple force system in which actual, programmed, and alternative troop lists are contained in a single data file. TAADS [17] is a system for documenting

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the organizational structure, requirements, and authorizations for both personnel and equipment for all Army units.[18] The TOE system contains equipment and personnel requirements for the planned and current standard TOE units of the Army.[19] The BOIPS is an automated data system designed to facilitate the recording, maintenance and retrieval of data used in planning the procurement and distribution of equipment prior to entry of the item into the formal Army authorization documents (TAADS and TOE).[20] Finally, the SACS provides a capability for computing force structured equipment and/or personnel requirements for a real or hypothetical force for the current year and each of a series of future years.[17] SACS utilizes the data bases contained in FAS, TAADS, TOE and BOIP to develop actual and projected force structures and their related equipment and personnel authorizations and requirements.

FDMIS and MIMS

Although FDMIS is intended to interface with SAILS at the intermediate level and provide the TAADS authorization data aginst which the requisition process for major items is established, the primary interactions of FDMIS with MIMS is at the HQ DA and wholesale levels. FDMIS, through the utilization of the FAS, TAADS, TOE and BOIP data files, and the data processing steps performed under SACS, provides the current and planned force structure data and the initial issue quantity of equipment data required to support that force structure. These data are a fundamental input to the planning activity of major item management. As described in that portion of the MIMS documentation depicting the requirements determinations process, the SACS data are an essential input in developing the major item program requirements utilized to establish procurement objectives in the Army Materiel Plan (AMP) Part I, and the distribution requirements utilized for distribution of equipment to units in the field as reflected in the Major Item Distribution Plan (MIDP). As a result, a basic element of the MIMS planning process is directly dependent on FDMIS and any changes that affect this FDMIS input to MIMS should be fully explored with regard to a potential impact on MIMS.

ARNGMIS [3,12]

Description

The Army National Guard Management Information System (ARNGMIS)
is a standard reporting and management system responsive to the informa-
tion requirements of the National Guard Bureau (NGB), the various states,
and the active services. It is supported by 52 data processing instal-
lations (one for each state, Puerto Rico, and the District of Columbia)
and a command computer center (NGB-AD) located in the Washington, D. C.,
metropolitan area. (Ref 12, p I-7). The system consists of three major
subsystems: personnel, comptroller, and logistics.

The logistics subsystem is designed to provide the United States
Property and Fiscal Offices (USPFO) in the various states with standardized
procedures for accounting, reporting, management, and internal audit
control for all federal property issued to the states. It incorporates
stockage principles, supporting vouchers, stock accounting, demand
accumulated data, equipment status reporting, inventory procedures,
and fiscal data for budget preparation.

ARNGMIS and MIMS

The current operational ARNGMIS applications (referred to as
"HARDCORE") consist of: Personnel Management System, Supply
Management System, and Financial Management System. The follow-on
applications are: Payroll (civilian technicians), Field Maintenance,
and Technical Personnel Management Information System (TPMS). Of
these subelements of ARNGMIS only the existing operational supply
management system interfaces with MIMS. The primary interface is
in the area of asset status reporting, excess reporting, and requisition-
ing. Currently, MIMS and ARNGMIS are compatible; however, if any
future changes are planned that would affect their interface, attention
should be given to ensure that both MIMS and ARNGMIS reflect these
changes in a like manner.

AUTOSTRAD [3,6]

Description

The Automated System for Transportation Data (AUTOSTRAD) is a five-year plan for developing and implementing automated data systems to support the Military Traffic Management Terminal Service (MTMTS) mission. It supports the assigned DOD single manager responsibilities for military traffic, land transportation, and common-user ocean terminals as established in DOD Directive 5160 53. (Ref 3, AUTOSTRAD Vol, p 1). The plan integrates six information systems by applying overall traffic management and systems concepts to each system. The six information systems are:

(a) Freight Automated System for Traffic Management (FAST)

(b) Terminal Management System (TERMS)

(c) Passenger Traffic Management System (PASTRAM)

(d) Worldwide Household Goods Information System for Traffic Management (WHIST)

(e) Command and Administration Data System (COADS)

(f) Mobility Planning Data System (MODS).

AUTOSTRAD and MIMS

Of the six information systems which comprise AUTOSTRAD, only FAST and TERMS are concerned with major items of equipment. FAST provides an automated means for managing the movement of DOD-sponsored freight within CONUS, with special emphasis on freight moving to air and ocean terminals. This system is intended to interface with the terminal operations, related operations at shipping installations, and systems of other DOD agencies and the transportation industry. TERMS aids in the management of the MTMTS operated common-user ocean terminals. This system encompasses all steps necessary in the processing of cargo.

Both FAST and TERMS process secondary items and major items in the same manner with no distinction between the categories. The implementation of these systems will have no direct impact on the current MIMS process, but they will have to be compatible with MIMS and interface with the SAILS, SPEEDEX, and ALPHA systems.

DLOGS [3,6,12]

Description

The Division Logistics System (DLOGS) is a standard multicommand automated card processing system for use in active Army National Guard and Reserve Divisions and separate brigades. The system provides automated techniques to division level asset management utilizing UNIVAC 1005 card processing equipment. Upon installation of CS_3 Division System the DLOGS UNIVAC 1005 System will be phased out of the active units and replaced by IBM 360-40 computers (Ref 12, p I-19).

DLOGS and MIMS

DLOGS is primarily an automated system for Army equipment asset management and as a result its primary interface with MIMS is in the area of asset control and reporting. DLOGS is intended to provide asset status information to SAILS at the intermediate level of supply.

DSU/GSU [3,6,12]

Description

The Direct Support Unit/General Support Unit (DSU/GSU) System is a mobile multicommand standard stock accounting management system for selected direct support and general support units in the Army in the field having a supply mission. The system provides for stock control and inventory accounting for the DSU/GSU as presecribed in AR 710-2. All computations such as quantitative requirements and posting of records are automatically accomplished by the ledger card NCR 500 computers thereby eliminating all manual operations to the system (Ref 12, p I-20).

DSU/GSU and MIMS

The DSU/GSU system is an operational system. The current application of DSU/GSU is to provide automated stock control for Class II, III, VII and IX items of equipment. Major items are represented by class VII equipment. The DSU/GSU application of automated stock control for major items of equipment is part of the current MIMS process at the DSU/ User Army management level. As in the case with DLOGS and DS_3 Division the DSU/GSU system is intended to interface with the SAILS system at the intermediate level. Any planned extension of the DSU/GSU application with regard to major items should be examined in the context of potential impact on the SAILS system.

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$$CS_3 \quad 3,6,12$$

Description

The Combat Service Support System (CS_3) is a standardized fully-integrated logistics, personnel, financial management and administrative system designed to enhance the effectiveness of combat service support for all tactical echelons from division through theater Army. The system will improve responsiveness and insure better control and management of logistic and personnel assets, authorizations, along with providing a means for computerizing the necessary financial data (Ref 12, p I-17).

CS_3 is divided into two system segments: CS_3 Corps and CS_3 Division. The CS_3 Corps segment will become part of the SAILS system when SAILS becomes operational. The CS_3 Division segment will remain as a separate system apart from SAILS at the division level. When fully implemented, CS_3 Division will provide the commanders with data to support operational decisions based on the maximized use of available resources. CS_3 uses ruggedized, third-generation ADPE (IBM 360/40) installed in mobile vans and shelters and is designed to provide computer-to-terminal and computer-to-computer linkage through use of secure communications through the command and Army area signal networks (Ref 12, p I-17).

CS_3 and MIMS

The current applications of CS_3 are: Personnel Management, Supply Management, Financial Management, and Maintenance Management. Of primary importance with regard to CS_3's impact on MIMS are the supply management and maintenance management applications. The primary major item management functions of these applications are concerned with equipment status reporting and with depot maintenance scheduling. In these respects CS^3 Division is intended to interface with the new SAILS system as the latter becomes operational. As CS^3 Division is extended to the active Army units, DLOGS will be phased out.

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Chapter 4

SUMMARY

The preceding chapters have presented a review of the AMIS systems
and their interaction with the MIMS process. Of the 36 systems comprising
AMIS, only nine(including SAILS) will interface with MIMS. One addi-
tional system, SAMS, was added to this list because it is believed that
SAMS will become a separate AMIS system in the near future.

Table 6 presents in a matrix form the summarized results of the
analysis of the interaction of these ten systems with the MIMS functional
areas. The degree of interaction between the AMIS system and the
respective MIMS functional areas is depicted in this table through the
assignment of the relative measures: major interaction and secondary
interaction. Two of the AMIS systems, ALPHA/BETA and SPEEDEX, have a
major impact on two or more of the functional areas of MIMS, while three
of the AMIS systems, SAILS, SAMS, and SPEEDEX, have a major impact on
only one functional area of MIMS. The remaining five AMIS systems have
only a secondary impact on one functional area of MIMS.

This summary matrix indicates that the systems having major
interaction with the MIMS process are associated with the wholesale level
of the Army management structure and that the systems at the lower echelons
have a lesser interaction. This fact is as expected in that the majority
of the activity associated with major item management takes place at
t he HQ DA and AMC levels with a lesser amount occurring at the inter-
mediate and DSU/User levels.

Clearly the most important AMIS system with regard to its inter-
action with the major item management process is the BETA system, which
represents the follow-on phase of ALPHA. Since BETA, as discussed
earlier, is concerned with nearly all of the major item management

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Table 6

SUMMARY MATRIX OF AMIS SYSTEMS INTERACTIONS WITH MIMS FUNCTIONAL AREAS

AMIS System	MIMS Functional Area: Item Identification	Requirements Determination	Acquisition	Distribution	Depot Maintenance	Inventory Reduction
(a) ALPHA	S		M	M	S	S
BETA	M	M	M	M	S	S
(b) SAILS				M	S	S
(c) SPEEDEX			S	M	M	S
(d) SAMS		S			M	S
(e) FIMIS		M	S	S		
(f) ARNGMIS				S		
(g) AUTOSTRAD				S		
(h) DLOGS				S		
(i) DSU/GSU				S		
(j) CS$_3$ DIV.				S		

Key: M - Major Interaction.
       S - Secondary Interaction.

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(RAC)

activities at the wholesale level it is strongly recommended that the MIMS documentation be used as one of the fundamental guidance documents for the development of BETA. In reviewing the interaction of the other AMIS systems with the MIMS process, it is recommended that, as each of these systems become more fully documented and move toward implementation, they be reviewed individually for compatibility with MIMS with regard to data elements, data files, data flows, and reporting requirements.

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